Claims:

1. A process for preparing an elastic fiber, comprising the steps of:

adding 1~20% by weight of a cellulose acetate to a polyurethane or polyurethaneurea solution, based on the total weight of the polyurethane or polyurethaneurea, and homogeneously stirring the mixture to obtain a spinning solution;

ripening the spinning solution; and

spinning the ripened solution.

2. The process according to claim 1, wherein the cellulose acetate is cellulose diacetate or cellulose triacetate having a degree of acetylation of 28%~72%.

3. The process according to claim 1 or 2, wherein the polyurethane or polyurethaneurea solution is obtained by reacting an organic diisocyanate with a polymeric diol to form a polyurethane precursor, dissolving the polyurethane precursor in an organic solvent, and reacting the precursor solution with a diamine and a monoamine sequentially.

4. The process according to claim 3, wherein the organic diisocyanate is selected from the group consisting of diphenylmethane-4,4'-diisocyanate, hexamethylenediisocyanate, toluenediisocyanate, buthylenediisocyanate, and hydrogenated p,p-methylenediisocyanate; the polymeric diol is selected from the group consisting of polytetramethyleneether glycol, polypropyleneglycol, and polycarbonatediol; the diamine is selected from the group consisting of ethylenediamine, propylenediamine, and hydrazine; and the monoamine is selected from the group consisting of diethylamine, monoethanolamine, and dimethylamine; and the organic solvent is selected from the group consisting of N,N'-dimethylformamide, N,N'-dimethylacetamide, and dimethylsulfoxide.

5. The process according to claim 1 or 2, wherein the spinning solution further contains at least one additive selected from dulling agents, UV stabilizers, antioxidants, NO_x gas anti-yellowing agents, anti-adhesion agents, dyeing promoters,

and anti-chlorine agents.

6. The process according to claim 1 or 2, wherein after the addition of the cellulose acetate, the homogeneous stirring is carried out for at least 2 hours, and the spinning solution is ripened by allowing it to stand at 30°C~70°C for 28~38 hours,

7. An elastic fiber prepared by the process according to claim 1 or 2.

8. A velvet fabric manufactured using the elastic fiber according to claim 7.